



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/633,351	08/01/2003	Patrick G. L. Perdu	690-011194-US (PAR) / D/A	3713				
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 06/15/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">DICKERSON, CHAD S</td></tr></table>		EXAMINER		DICKERSON, CHAD S	
EXAMINER								
DICKERSON, CHAD S								
			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2625</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2625		
ART UNIT	PAPER NUMBER							
2625								
			<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>06/15/2007</td><td>PAPER</td></tr></table>	MAIL DATE	DELIVERY MODE	06/15/2007	PAPER	
MAIL DATE	DELIVERY MODE							
06/15/2007	PAPER							

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/633,351	Applicant(s) PERDU, PATRICK G. L.	
	Examiner Chad Dickerson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>see attachment</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - On page 13, line 15: please correct the phrase "from network device 420 to network device 420".

Appropriate correction is required.

Claim Objections

2. Claim 10 is objected to because of the following informalities:
 - On line 19: the phrases "the online printing/copying system" and "the offline post processing system" is suggested to be changed to -- an online printing/copying system -- and -- an offline post processing system --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 14-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claim 14: the claim merely stating in the preamble "a computer program product" does not recite a physical structure, such as a computer memory, used to assist a computer program to realize its functionality, and therefore, since it is not treated as a computer program product, it is deemed to be non-statutory subject matter. It is suggested to omit the phrase and use the claim language following the phrase as the

new preamble in the claim. Claims 15-17 are rejected because of their dependence on a rejected claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Crowley '727 (US Pat No 5193727).

Re claim 1: Crowley '727 discloses a system for incorporation of post-production operations to a web output from an image transfer device comprising:

accumulating post processing instructions for printed media during printing operations (i.e. the determination system (44) is fed information as to the page, which has an image due to previous printing operations, should contain a post-processing operation. The feeding of information as to which page should receive post-processing is analogous to accumulating post processing for printed media; see fig. 1; col. 4, lines 5-57);

recording the post processing instructions on an information device (i.e. the determining means (44) has a register means that is able to store information related to a data value representative of a post-production operation to be performed upon the web. The recording of the post processing instructions is analogous to the storing of the

post processing instructions; see fig. 1; col. 2, lines 24-49; col. 4, lines 58-67 and col. 5, lines 1-5); and

playing back the post processing instructions for controlling offline post processing of the printed media (i.e. the post processing operation instruction is presented, or commanded, to the post-processing device to perform a desired operation to a certain page in the web. Since the post-processing device (48) is separated from the image transfer device (40), the post-processing device is considered to be offline. This is analogous to playing back the post processing instruction for controlling offline post processing of the printed media; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Re claim 5: The teachings of Crowley '727 are disclosed above.

Crowley '727 discloses the method, wherein playing back the post processing instructions comprises:

conveying the post processing instructions from the information device through a link to a post processing system (i.e. the determination device (44), analogous to the information device, conveys the post-processing instructions to the post-processing device (48). Although a link is not specifically disclosed in conveying the instructions, the instructions are conveyed between the two devices in a manner of communication that performs the function of a link; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5); and

Art Unit: 2625

routing the post processing instructions to one or more post processing modules for performing the offline post processing (i.e. the post-processing device receives the instructions and performs the operation of post-processing to the document that is indicated for post-processing. In this example, only one post-processing device is used, however, there can be a plurality of post-processing devices used in the system; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67; col. 5, lines 1-5 and col. 7, lines 1-13).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley '727 in view of Murata '028 (US Pat No 7054028).

Re claim 2: The teachings of Crowley '727 are disclosed above.

Crowley '727 discloses the method, further comprising transporting the information with the printed media from an online printing/copying system where the printing operations occur to an offline post processing system where the post processing occurs (i.e. while the web is fed to the image transferring device, it is transported to the post-processing device along the intermediate loop (74). Also, information regarding the web is also transported to the determination unit (44) and assists the post-production system to

Art Unit: 2625

determine the period in which the page in which post-processing should occur in the post-processing device (48); see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

However, Crowley '727 fails to teach transporting the information device with the printed media.

However, this is well known in the art as evidenced by Murata '028. Murata '028 discloses transporting the information device with the printed media (i.e. a removable storage medium is implemented in the system and the information stored on the medium controls a printing means according to the output control data. Also, information related to the finisher may be stored on the storage device and implemented on a finisher in the system; see col. 3, lines 15-35 and col. 10, lines 34-49).

Therefore, in view of Murata '028, it would have been obvious to one of ordinary skill at the time the invention was made to transport the information device with the printed media in order to store image data with output control data on a removable storage medium using a personal computer and installing the storage medium in a copying device with finishing capabilities (as stated in Murata '028 col. 3, lines 15-35 and col. 10, lines 34-49).

9. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley '727 in view of Webster '606 (US Pat No 5559606).

Re claim 3: The teachings of Crowley '727 are disclosed above.

Art Unit: 2625

Crowley '727 discloses the method, wherein accumulating post processing instructions comprises compiling post processing instructions from a printing module (i.e. the determination unit (44) obtains signals from the image forming device (40) signaling a post-processing operation to occur to a page being passed through the system on the web; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

However, Crowley '727 fails to teach compiling post-processing instructions from each of a plurality of printing modules.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses compiling post-processing instructions from each of a plurality of printing modules (i.e. from various outside sources, jobs indicating several finishing or post-processing procedures are gathered by the marking modules and eventually sent to the respective post-processing devices in the system. The finishing modules gather the post-processing instructions from the marker or printer modules. Gathering the instructions is analogous to compiling the post-processing instructions; see col. 5, lines 54-66 and col. 6, lines 1-45).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to compile post-processing instructions from each of a plurality of printing modules in order to coordinate the machine modules to render a job (as stated in Webster '606 col. 6, lines 1-45).

Re claim 4: The teachings of Crowley '727 are disclosed above.

Art Unit: 2625

Crowley '727 discloses the method, wherein recording the post processing instructions comprises:

conveying the accumulated post processing instructions (i.e. in the system, the post-processing instructions are conveyed to the determination unit (44) in order to assist the post-processing device (48) in performing the post-processing operation; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5); and

recording the accumulated post processing instructions by way of a link between the individual one printing module and the information device (i.e. the post-processing instructions are recorded or stored on the determination device, which is analogous to the information device. The data (54) sent from the image transfer device (40) to the determination device (44) is transmitted through a means of communication, this means of communication may not specifically be called a link, but the communication between the two devices functions as a link; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

However, Crowley '727 fails to teach conveying the accumulated post processing instructions to a plurality of printing modules.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses conveying the accumulated post processing instructions to a plurality of printing modules (i.e. in the system, a plurality of devices convey post processing instructions to marking modules or printing modules; see col. 5, lines 54-66 and col. 6, lines 1-45).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to convey the accumulated post processing instructions to a plurality of printing modules in order to coordinate the machine modules to render a job (as stated in Webster '606 col. 6, lines 1-45).

10. Claims 6, 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata '028 in view of Webster '606.

Re claim 6: Murata '028 discloses an offline print method for printing image data in a removable storage medium based on output control data in the same medium comprising:

accumulating post processing instructions for printed media (i.e. using the user's computer in the system, post processing instructions are gathered, or accumulated, to operate the image forming apparatus when using the storage medium for printing in the system; see fig. 8; col. 3, lines 15-35 and col. 10, lines 34-49);

recording the post processing instructions on an information device (i.e. recording or storing the post processing instructions in the removable storage medium is performed on the user's computer; see fig. 8; col. 3, lines 15-35 and col. 10, lines 34-49);

transporting the information device with the media to an offline post processing system (i.e. the removable storage medium, with the image data stored therein, is taken, or transported, to the image forming device in order to be installed into the printer

Art Unit: 2625

for the image data stored to be printed offline in a desired form; see fig. 8; col. 3, lines 15-35 and col. 10, lines 34-49); and

playing back the post processing instructions for controlling offline post processing of the printed media (i.e. the image data and output control method stored on the removable storage medium presents, or plays back, the post processing instructions to the image forming apparatus for controlling the offline printing and post processing of the printed media. At this point, the media is printed and is ready for post processing; see fig. 8; col. 3, lines 15-35 and col. 10, lines 34-67 and col. 11, lines 1-13).

However, Murata '028 fails to teach accumulating post processing instructions for printed media from a plurality of printing modules and transporting the information with the printed media.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses accumulating post processing instructions for printed media from a plurality of printing modules (i.e. ...from various outside sources, jobs indicating several finishing or post-processing procedures are gathered by the Mark Facility and eventually sent to the respective post-processing devices in the system. The finishing modules gather the post-processing instructions from the marker or printer modules. Gathering the instructions is analogous to compiling the post-processing instructions; see col. 5, lines 54-66 and col. 6, lines 1-45) and transporting the information with the printed media (i.e. the sheets, once printed out by the printer engine, can be transferred from the printer engine to the finishing devices; see col. 5, lines 28-33).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to accumulate post processing instructions for printed media from a plurality of printing modules and transport the information with the printed media in order to coordinate the machine modules to render a job (as stated in Webster '606 col. 6, lines 1-45).

Re claim 9: Murata '028 discloses an offline print method for printing image data in a removable storage medium based on output control data in the same medium comprising:

an online printing/copying operation having a controller for determining post processing instructions for printed media (i.e. the printer/copier in the system has a controller (85) that is able to determine the post processing instructions for printed media that are installed in the PC card slot (89) through the removable storage medium; see figs. 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49) and for recording the post processing instructions on an information device (i.e. the output control data relating to the finishing operations, or post-processing, are stored on a removable storage medium. The function of recording is analogous to the function of storing; see col. 3, lines 15-35 and col. 10, lines 34-49); and

an post processing operation operable to play back the post processing instructions from the information device for controlling post processing of the printed media (i.e. the printer/copier with finishing capabilities are considered as an offline printing function. A post-processing operations, or instructions, are able to be

presented to the finishing device from the removable storage medium, for controlling the post-processing of the printed media; see col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 fails to teach offline post processing.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses offline post processing (i.e. in the system is disclosed, in figure 2, a downstream finisher station; see fig. 2; col. 5, lines 16-53).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to have offline post processing in order to have a downstream finishing system (as stated in Webster '606 col. 5, lines 16-53).

Re claim 11: The teachings of Murata '028 in view of Webster '606 are disclosed above.

However, Murata '028 fails to teach the printing system, wherein the online printing/copying operation further comprises a plurality of printing modules, and the post processing instructions are compiled from each of the plurality of printing modules.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses wherein the online printing/copying operation further comprises a plurality of printing modules (i.e. in figure 3, a plurality of marking, or printing, modules are disclosed. These marking modules are used to print images on paper feed to the marking modules; see col. 5, lines 54-66 and col. 6, lines 1-45), and the post processing instructions are compiled from each of the plurality of printing modules (i.e. in the prior art example, the finishing modules receive instruction from the marking modules. If the prior art used the plurality of marking modules in figure 3 to operate in the prior art

Art Unit: 2625

system, the function of having multiple post-processing instructions gathered or compiled from the plurality of marking modules, or printing modules, will be performed; see figs. 2 and 3; col. 5, lines 16-66 and col. 6, lines 1-66).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to have the online printing/copying operation further comprise a plurality of printing modules, and the post processing instructions to be compiled from each of the plurality of printing modules in order to coordinate the modules to render a job (as stated in Webster '606 col. 6, lines 26-35).

Re claim 12: The teachings of Murata '028 in view of Webster '606 are disclosed above.

However, Murata '028 fails to teach the printing system, further comprising: a final printing module where post processing instructions are accumulated from the plurality of printing modules and a link for recording the accumulated post processing instructions from the final printing module to the information device.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses the printing system, further comprising:

a final printing module where post processing instructions are accumulated from the plurality of printing modules (i.e. the print module, or marking module, receives requests or instructions for post processing to occur to the document currently being processed for printing. These requests are gathered, or accumulated, in order to be given to the finisher to instruct finishing functions; see col. 5, lines 16-53) and

a link for recording the accumulated post processing instructions from the final printing module to the information device (i.e. there is a visible link between the marking module and the finishing module. The marking module instructs the finishing module of the finishing tasks by a way of communication, although this manner of communication is not specified as a link. However, it is clearly seen how the invention describes how certain modules depend on the modules that precede others in the feeding, printing and finishing process. The control dependency is on the former device in the device order, which means that a marking device controls the finishing device based on the order of the neighboring module; see col. 5, lines 16-53).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to have a final printing module where post processing instructions are accumulated from the plurality of printing modules and a link for recording the accumulated post processing instructions from the final printing module to the information device in order to coordinate the modules to render a job (as stated in Webster '606 col. 6, lines 26-35).

Re claim 13: The teachings of Murata '028 in view of Webster '606 are disclosed above. Murata '028 discloses the printing system, wherein the offline post processing operation further comprises:

one or more post processing modules for performing the post processing (i.e. in the printer/copier system, there a post processing module that performs different features of post processing or finishing; see col. 3, lines 15-35 and col. 10, lines 34-49);

a link, connected to at least one of the one or more post processing modules for playing back the post processing instructions for use by the one or more post processing modules (i.e. in the printer, there is a communication link that links the CPU (85) to the finisher, in order to instruct the finisher of what finishing operations to perform. When the removable storage medium is installed in the printer, the post-processing instructions are played back, or presented, to the finisher in order to control the finishing functions designated by the user; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 fails to teach an offline post processing.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses offline post processing (i.e. in the system is disclosed, in figure 2, a downstream finisher station; see fig. 2; col. 5, lines 16-53).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to have offline post processing in order to have a downstream finishing system (as stated in Webster '606 col. 5, lines 16-53).

11. Claims 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata '028, as modified by Webster '606, and further in view of Crowley '727.

Re claim 7: The teachings of Murata '028 in view of Webster '606 are disclosed above.

Webster '606 teaches the method, wherein recording the post processing instructions comprises: conveying the accumulated post processing instructions to an

individual one of the plurality of printing modules (i.e. in the system, a plurality of devices convey post processing instructions to marking modules or printing modules; see col. 5, lines 54-66 and col. 6, lines 1-45).

However, Murata '028 in view of Webster '606 fails to teach recording the accumulated post processing instructions by way of a link between the individual one printing module and the information device.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses recording the accumulated post processing instructions by way of a link between the individual one printing module and the information device (i.e. the post-processing instructions are recorded or stored on the determination device, which is analogous to the information device. The data (54) sent from the image transfer device (40) to the determination device (44) is transmitted through a means of communication, this means of communication may not specifically be called a link, but the communication between the two devices functions as a link; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to record the accumulated post processing instructions by way of a link between the individual one printing module and the information device in order to store data representing a post-production operation (as stated in Crowley '727 col. 4, lines 5-67).

Re claim 8: The teachings of Murata '028 in view of Webster '606 are disclosed above.

However, Murata '028 in view of Webster '606 fails to teach the method, wherein playing back the post processing instructions comprises: conveying the post processing instructions from the information device through a link to the post processing system; and routing the post processing instructions to one or more post processing modules for performing the offline post processing.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses the method, wherein playing back the post processing instructions comprises:

conveying the post processing instructions from the information device through a link to the post processing system (i.e. the determination device (44), analogous to the information device, conveys the post-processing instructions to the post-processing device (48). Although a link is not specifically disclosed in conveying the instructions, the instructions are conveyed between the two devices in a manner of communication that performs the function of a link; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5); and

routing the post processing instructions to one or more post processing modules for performing the offline post processing (i.e. the post-processing device receives the instructions and performs the operation of post-processing to the document that is indicated for post-processing. In this example, only one post-processing device is used, however, there can be a plurality of post-processing devices used in the system; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67; col. 5, lines 1-5 and col. 7, lines 1-13).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to convey the post processing instructions from the information device through a link to the post processing system and route the post processing instructions to one or more post processing modules for performing the offline post processing in order to instruct the post-production device to perform an operation (as stated in Crowley '727 col. 4, lines 5-67; col. 5, lines 1-5).

Re claim 10: The teachings of Murata '028 in view of Webster '606 are disclosed above. Murata '028 teaches the printing system, wherein the information device is transportable to the offline post processing system (i.e. a removable storage medium is implemented in the system and the information stored on the medium controls a printing means according to the output control data. Also, information related to the finisher may be stored on the storage device and implemented on a finisher in the system; see col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 fails to teach an offline post processing system.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses an offline post processing system (i.e. in the system is disclosed, in figure 2, a downstream finisher station; see fig. 2; col. 5, lines 16-53).

However, Murata '028 in view of Webster '606 fails to teach an information device is transportable with the printed media from the online printing/copying system to the offline post processing system.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses an information device is transportable with the printed media from the online printing/copying system to the offline post processing system (i.e. the web being transported through the system represents printed media. The online printing/copying system is represented by the image transfer device (40), and the offline post-processing system is represented by the post-processing device (48). The web, which represents printed media in the system, is transported from the image transfer device (40) to the post-processing device (48). With the incorporation of Murata '028 in view of Webster '606 with the transportation of the information device to the post-processing part of the copier combined with the feature of Crowley '727, the above feature is performed; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to have an information device transported with printed media from the online printing/copying system to the offline post processing system in order to send information regarding post-production, along with the page, to the post processing device (as stated in Crowley '727 col. 4, lines 5-57).

12. Claims 14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata '028 in view of Crowley '727.

Art Unit: 2625

Re claim 14: Murata '028 discloses an offline print method for printing image data in a removable storage medium based on output control data in the same medium comprising:

a computer useable medium having computer readable code means embodied therein for causing a computer to print media (i.e. the CPU (85) contained in the printer causes the printer to print different types of images on media according to the input in the system; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49), the computer readable code means in the computer program product comprising:

computer readable program code means for causing a computer to accumulate post processing instructions (i.e. the CPU (85) accumulates post processing instructions from the removable storage memory device after the post-processing instructions are stored on the removable device and installed in the PC card slot (89) of the printer; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49);

computer readable program code means for causing a computer to record the post processing instructions on an information device (i.e. the user's computer records information regarding post-processing instructions on a removable storage device, which is analogous to an information device; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49); and

computer readable program code means for causing a computer to play back the post processing instructions for controlling post processing of the printed media (i.e. when the removable storage medium is installed in the PC card slot (89), the information for instructing post-processing is played back, or presented, in order to

control the post processing of the printed media that is output from the printer; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 fails to teach to accumulate post processing instructions for the printed media during printing operations and offline post processing.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses to accumulate post processing instructions for the printed media during printing operations (i.e. during the printing process, the post processing device receives or accumulates post-processing instructions for the printed media during printing from the determination device (44). The determination device (44) receives information from the image transfer device (40) that assists the determination device (44) when the post-processing should be performed; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5) and offline post processing (i.e. since the post-processing device is separate from the image forming device, this is considered as offline post processing; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to accumulate post processing instructions for the printed media during printing operations and have offline post processing in order to instruct the post-production device to perform an operation when data gathered indicates such an action (as stated in Crowley '727 col. 4, lines 5-67 and col. 5, lines 1-5).

Re claim 16: The teachings of Murata '028 in view of Crowley '727 are disclosed above.

Murata '028 discloses the computer program product, wherein the computer readable program code means for causing a computer to record the post processing instructions (i.e. the user's computer records information regarding post-processing instructions on a removable storage device, which is analogous to an information device; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49) comprises:

computer readable program code means for causing a computer to convey the accumulated post processing instructions to an individual one of a plurality of printing modules (i.e. the user's computer conveys accumulated post processing instructions to an individual printing module through a removable storage medium that stores the post-processing instructions for the printer; see col. 3, lines 15-35 and col. 10, lines 34-49); and

computer readable program code means for causing a computer to record the accumulated post processing instructions by way of the information device (i.e. the removable storage medium is used to record the accumulated post-processing instructions that will control the finishing output of the image data; see col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 fails to teach causing a computer to record the accumulated post processing instructions by way of a link between the individual one printing module and the information device.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses causing a computer to record the accumulated post processing instructions by way of a link between the individual one printing module and the

Art Unit: 2625

information device (i.e. the determination device (44) has a means for recording, or storing, the accumulated post-processing instructions between the image transfer device (40), considered as the printing module, and the determination unit (44) with a storage device, considered in this example as a information device. Although a specific link is not disclosed, the communication between the two devices that signal to the determination device (44) to perform a post-processing function on a certain part of the web, functions as a link between the two devices. The communication between the devices performs the function of the link; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to cause a computer to record the accumulated post processing instructions by way of a link between the individual one printing module and the information device in order to be fed data that contains a post-processing operation (as stated in Crowley '727 col. 4, lines 5-67).

Re claim 17: The teachings of Murata '028 in view of Crowley '727 are disclosed above. Murata '028 discloses the computer program product, wherein the computer readable program code means for causing a computer to play back the post processing instructions media (i.e. when the removable storage medium is installed in the PC card slot (89), the information for instructing post-processing is played back, or presented, in order to control the post processing of the printed media that is output from the printer; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49) comprises:

computer readable program code means for causing a computer to convey the post processing instructions from the information device through a link to a post processing system (i.e. the removable storage medium is placed in the PC card slot (89) to convey the post processing instructions from the storage medium to the post processing, or finishing, system. The communication between devices in the system occurs through the CPU bus (83), which operates as a link between the storage medium, considered as the information device, and the printer shown in figure 1; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 3-49); and

computer readable program code means for causing a computer to route the post processing instructions to one or more post processing modules for performing the post processing (i.e. when the removable storage medium is in the PC card slot (89), the post-processing instructions are sent to the finisher to perform one of the many finishing functions performed by the finisher (222 or 221) in the system; see figs. 1 and 8; col. 3, lines 15-35; col. 10, lines 3-67 and col. 11, lines 1-13).

However, Murata '028 fails to teach offline post processing.

However, this is well known in the art as evidenced by Crowley '727. Crowley '727 discloses offline post processing (i.e. since the post-processing device is separate from the image forming device, this is considered as offline post processing; see fig. 1; col. 2, lines 24-49; col. 4, lines 5-67 and col. 5, lines 1-5).

Therefore, in view of Crowley '727, it would have been obvious to one of ordinary skill at the time the invention was made to have offline post processing in order to have

post-production device to perform a post-production operation (as stated in Crowley '727 col. 4, lines 5-67 and col. 5, lines 1-5).

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata '028, as modified by Crowley '727, and further in view of Webster '606.

Re claim 15: The teachings of Murata '028 in view of Crowley '727 are disclosed above. Murata '028 discloses the computer program product, wherein the computer readable program code means for causing a computer to accumulate post processing instructions (i.e. the CPU (85) accumulates post processing instructions from the removable storage memory device after the post-processing instructions are stored on the removable device and installed in the PC card slot (89) of the printer; see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49) comprises computer readable program code means for causing a computer to compile post processing instructions (i.e. the printer's CPU (85) compiles, or gathers, post-processing instructions from the removable storage medium installed in the PC card slot (89); see fig. 1, 2 and 8; col. 3, lines 15-35 and col. 10, lines 34-49).

However, Murata '028 in view of Crowley '727 fails to teach to compile post processing instructions from each of a plurality of printing modules.

However, this is well known in the art as evidenced by Webster '606. Webster '606 discloses to compile post processing instructions from each of a plurality of printing modules (i.e. in figure 3, with a plurality of marking, or printing modules, the finishing

modules can gather, or compile, post-processing instructions from the marking modules in the system. In the prior art system, the marking modules convey the finishing instructions to the next module to perform the function. With figure 3 displaying a plurality of marking modules, the prior art system can use these modules to send post-processing instructions to the next finishing module in the process; see figs. 2-4; col. 5, lines 15-53).

Therefore, in view of Webster '606, it would have been obvious to one of ordinary skill at the time the invention was made to compile post processing instructions from each of a plurality of printing modules in order to coordinate modules to render a job (as stated in Webster '606 col. 6, lines 1-66).

Conclusion


14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Webster '635 (US Pat No 5710635) discloses an online printing/copying system and offline post processing system. Webster '635 also discloses a method for controlling jobs, which controls the post processing affecting the print jobs. The apparatuses in the system accumulate post-processing instructions for printed media from a plurality of printing modules.

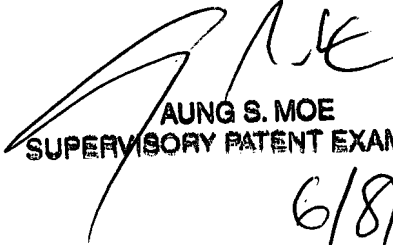
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

Art Unit: 2625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/ 
Chad Dickerson
June 6, 2007


AUNG S. MOE
SUPERVISORY PATENT EXAMINER
6/8/07